

# QUALITY OF HUMAN DEVELOPMENT INDEX (HDI) IN MUSLIM COUNTRIES (CASE STUDY OF OIC MEMBERS)

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## Abstract

*This study analyzes factors or variables that effect of human development index (HDI) in Muslim countries, a case study of the Organization of Islamic Cooperation (OIC) member countries. The data of 33 selected OIC member countries from 2007-2016 were analyzed using panel data regression analysis. The entire models show the significant influence of some independent variables to the level of HDI in Muslim countries. However, a variable number of the population contributes positively to HDI in all models. Unfortunately, foreign direct investment (FDI) does not add to the increasing of HDI; this is the biggest challenge faced by the government in various Muslim countries. While government fiscal policy reflected in government spending (G) contributes positively to HDI in OIC member countries.*

**Keywords:** HDI, Muslim countries, OIC Member Countries

## BACKGROUND

In 2018, one of the institutions under the United Nations (UN) which deals with development program issues (United Nations Development Program, UNDP) published a report entitled Human Development Indices and Indicators: 2018 Statistical Update (UNDP, 2018). The report describes the development and results of the calculation of the Human Development Index (HDI). This index represents the quality of human development in a country or region, which consists of three main components, life expectancy; education level; and community income level. This report covers 189 countries categorized in 4 (four) index levels, very high; high; medium; and low.

Countries in Western Europe and North America dominate the very high and high

HDI score, meaning that the quality of human development in these countries is better than other regions. The fact revealed that there are no countries predominantly Muslim population (Muslim countries) which are in the top 30 states with the highest HDI (Table 1). Although there are several rich Muslim countries, the quality of their human development is not the highest.

**Table 1. List of 30 Countries with the Highest HDI**

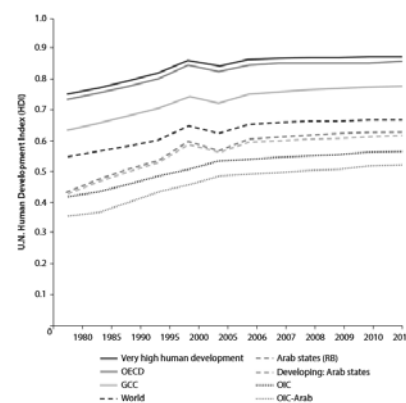
No	Country	No	Country	No	Country
1	Norway	11	Denmark	21	Luxembourg
2	Switzerland	12	Canada	22	Israel
3	Australia	13	United States	23	South Korea
4	Ireland	14	United Kingdom	24	France
5	Germany	15	Finland	25	Slovenia
6	Iceland	16	New Zealand	26	Spain
7	Hong Kong	17	Belgium	27	Czech Republic
8	Sweden	18	Liechtenstein	28	Italy
9	Singapore	19	Japan	29	Malta

10	Netherlands	20	Austria	30	Estonia
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There are only 6 Muslim countries that can rank in the top 50 states with the highest HDI, namely the United Arab Emirates (34), Qatar (37), Brunei Darussalam (39), Saudi Arabia (40), Bahrain (43) and Oman (48). The majority of Muslim countries fill the middle and lower ranks based on their HDI. The latest report has not changed much from the previous years' data compiled by Askari and Rehman (2013). Figure 1 shows a comparison of the HDI score in various regions of the world and its movements for more than 30 years from 1980-2011. Askari and Rehman compared the value of HDI in the multiple areas such as the Organization for Economic Co-operation and Development (OECD); Gulf Cooperation Council (GCC) —Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates; Arab countries and member countries of the Organization of Islamic Cooperation (OIC).

The finding of this analysis is that the value of HDI in Muslim countries is much lower than the developed countries. When compared with the average of world HDI value, the HDI value of Muslim countries, especially OIC members is still much more moderate. Moreover, groups of OIC member countries and also Arab countries are the group of countries with the lowest HDI. The fact is different from the exclusive group of Arab countries included in the GCC, which are rich countries, their HDI values are only slightly below developed countries, but still above the world average.

This fact is indeed a concern and question for various parties, why is the quality of human development in Muslim-majority countries so low? Whereas Islam is a religion that strongly emphasizes the importance of the quality of human development (Thaib, 2013). What are the dominant factors affecting the high and low HDI in Muslim countries, then what is the right policy to improve it? Muslim countries in this study refer to members of the Organization of Islamic Cooperation (OIC) or formerly called the Organization of the Islamic Conference (OIC). OIC is considered to be able to become a representation of an organization that houses all Muslim-majority countries.



**Figure 1. Comparison of the Human Development Index (HDI) from Various Regions in the World (1980-2011)**

Therefore, the formulation of the problem proposed in this study is how the dynamics of the human development index (HDI) in the Organization of Islamic Cooperation (OIC) members? What factors or variables dominantly affect the high and low human development index (HDI) in those countries?

## **Literature Review and Theory Framework**

The study of the human development index (HDI) is still concern by many scholars in various countries, not only in Indonesia. For example, Razmi (2012) examined the effect of per capita income and government spending on health in Iran for the last few decades. The results of this study indicate that both variables have a significant effect on the level of the human development index (HDI). It shows the critical role of the government in carrying out fiscal policy for the public interest. Baghirzade (2012) conducted a study in 12 countries of the Commonwealth of Independent States (CIS) with data from 1995-2009. This study focus on the relationship of the private sector investment, especially foreign direct investment (FDI) to the HDI. This research is based on the theoretical argument that increases investment will increase the income (welfare) of the community; they can be followed by an increase in life expectancy and education level. This study proves that increasing foreign direct investment in various CIS countries has a positive impact on the human development index (HDI).

Smith & Shah (2016) also conducted a study with a broader scope, about 188 countries in the world and used seven independent variables: per capita income, life expectancy, education level, Gini index, fertility rate, use of CO<sub>2</sub> emissions and inflation. Smith & Shah grouped the research objects based on the level of HDI: low, medium, high and very high. The result of the study shows that all independent variables affect the HDI. This finding indicates that the quality of the human development

index is no longer only influenced by aspects of the HDI compiler, but is also influenced by other non-economic variables. Also, groups of countries based on the level of HDI also show different results. So, the government's policies to improve the quality of human development index in different countries certainly require should be different.

The latest research was carried out by Arisman (2018) with the object of 10 ASEAN countries by employing data from 2000 to 2015. This study uses several variables that are relatively different from previous studies to get a broader picture of the factors that influence of human development index. The independent variables are population, inflation, unemployment, and per capita income. Population effect negatively to HDI, it is mean that the larger the people of a country the more strenuous effort to achieve a high HDI. Meanwhile, unemployment and inflation do not affect the HDI; this contrasts with the influence of per capita income that influences positively to the HDI. It is very reasonable because per capita income is one of the elements in the calculation of the HDI.

So far, there have not found any research that focuses on Muslim countries, especially to the members of the Organization of Islamic Cooperation (OIC). Therefore, it needs in-depth research to know the determinants of HDI in Muslim countries and what kind of fit policy to raise it. This study attempted to develop the research conducted by Arisman (2018); Smith & Shah (2016) and also supported by other studies.

### **Concept of Human Development Index (HDI)**

At the beginning of the emergence of economic development theory, the study focused on efforts to achieve quantitative economic performance and financial dimensions. The country's economic performance is always seen from the high economic growth or per capita income of the citizens. However, the concept of economic development must be distinguished from the idea of economic growth which has been the primary orientation of the government. Economic development can be achieved when the increase of national income is accompanied by an improvement in the quality of people's lives in various aspects, such as education, health, social justice, etc. (Todaro and Smith, 2015:10). Therefore, other measurements began to emerge internationally; one of them was the Human Development Index (HDI) (Kuncoro, 2010:5).

According to Sen, a person to achieve his actual capabilities is influenced by economic opportunities, political freedom, social facilities, health, primary education, and the drive to take the initiative. He noted that development centered on individual freedom has several advantages over conventional views. First, provide a more in-depth assessment as a basis for development evaluation. Second, freedom can encourage the creation of other liberties. Third, the study of freedom can help us distinguish the role of government between "repressive government intervention" and the role of "advocates in encouraging freedom" (Kuncoro, 2010:7). To measure the extent of human development, an index called the Human Development Index (HDI) was created.

According to the UNDP (United Nation Development Program), the human development index is a composite index that is used to measure the average achievement of a country in three fundamental aspects of human development. First, long life, as measured by life expectancy; second, education, as measured by the average length of schooling and literacy rates of the population at aged 15 years and over; third, living standards as measured by per capita income (Todaro, 2015: 112).

### **Components of the Human Development Index (HDI)**

The calculation of the human development index consists of 3 main aspects, namely:

1. Life Expectancy Rate. Life expectancy is the average estimation of how many years a person lives. Life expectancy is a tool to evaluate government performance in improving the welfare of the population in general and developing health status in particular.
2. Level of Education. To measure the dimensions of education or knowledge, there are two indicators, the average length of schooling and literacy rates. The average length of school describes the number of years used by residents aged 15 years and over in undergoing formal education. While the literacy rate is the percentage of people aged 15 years and over who can read and write Latin letters or other letters. These two indicators are combined in the process of determining the knowledge dimension with weights for the average school length of one third and literacy rates of two thirds (BPS Catalog, 2008: 12).

3. Decent Standard of Living. A decent standard of living illustrates the level of welfare enjoyed by the population as a result of economic improvement. United Nation Development Program (UNDP) measures the decent standard of living using adjusted real Gross Domestic Product (GDP), while BPS (Central Bureau of Statistics) measures decent standard of living using the average real per capita expenditure (BPS Catalog, 2008:12).

IPM values range from 0-1,000. Based on these values, UNDP divides the human development status of a country or region into four groups:

1. Low : 0,000 - 0,554
2. Medium : 0,555 - 0,699
3. High : 0,700 - 0,799
4. Very high : 0,800 - 1,000

In this research, high and very high level are joined to be one group, because of the availability of data (high).

## METHOD

This research is a quantitative empirical study with a panel data regression model. According to Kuncoro (2001), panel data is a combination of time-series data with cross-section data. The scope of the research object is all Muslim countries that are members of the Organization of Islamic Cooperation (OIC) totaling 57 countries. However, considering the availability of data, only 33 OIC countries were observed in this study. Data series from

2007 to 2016 (10 years) amounted to 330 observation units.

## Types and Data Sources

This study uses independent variables in the form of secondary data including population, unemployment rate, inflation, foreign direct investment (FDI) and government expenditure. The dependent variable is the human development index (HDI). All data is obtained from the World Bank website and various related international institutions.

## Model Estimation

The panel data regression equation model compiled as follows:

$$IPM = \beta_0 + \beta_1 POP_{it} + \beta_2 UNM_{it} + \beta_3 INF_{it} + \beta_4 FDI_{it} + \beta_5 G_{it} + \mu$$

Where:

POP : Population,

UNM : Unemployment rate,

INF : Inflation,

FDI : Foreign direct investment

G : Government expenditure

$\mu$  : Residual (error term)

This study analyzed comprehensively by arranging 4 (four) econometric models/ equations, based on the level of HDI in each country. The four models of the panel data regression equation are:

1. Data Panel Regression with all countries(33)
2. Panel Data Regression for low HDI category countries (17)

3. Panel Data Regression for middle HDI category countries (7)
4. Panel Data Regression for high HDI countries (9)

### Panel Data Regression Model Selection

Three models can be used in estimating the regression model with panel data, namely:

- a. Common Effect Model: Common effect regression model is the most straightforward technique to systemize panel data. It is said to be the simplest because it only combines cross-section and time series data without looking at the differences between time and individual, then the model can be estimated by the ordinary least square (OLS) method.
- b. Fixed Effect Model: Assumptions used in the fixed effect regression model is the difference of the intercept between individuals while the slope remains the same between individuals. To manipulate the fixed effect model is to use a dummy variable technique to explain the difference in the intercept. This estimation is often called the least square dummy variables technique.
- c. Random Effect Model: If the fixed effect model, the difference between individuals and or time is reflected through intercept, then the random effects of these differences are accommodated through errors. This technique also takes into account that errors may correlate throughout the time-series and cross-section.

### Selection of Panel Data Regression Estimation Techniques

To choose the best model, three tests are used:

- a. Chow Test: Chow test is used to compare which is better between Common Effect and Fixed Effect. If the probability value is less than the significant level of 5% (0.05), then the model used is a Fixed Effect, but if more than 5%, so the Common Effect is used.
- b. Hausman Test: Hausman test is used to compare which is better between the Fixed Effect or Random Effect model, if the probability value is less than the significant level of 5% (0.05), then the model used is Fixed Effect but if more than 5%, so the Random Effect is used.
- c. Lagrange Multiplier (LM) Test: The Lagrange Multiplier (LM) test is used to determine whether Random Effect is better than the Common Effect model. The calculation of LM value will be compared with the Chi-Squared value of the table with the degree of freedom as much as the number of independent variables and alpha or the significance level of 5%. If the LM value is > Chi-Squared table, the chosen model is the Random effect.

### Hypothesis testing

- a. Simultaneous Significance Test (F Test): F test is conducted to determine whether the overall independent variables have a significant effect on the dependent variable. To find out whether it is influential or not, a comparison of the probability value F is calculated with  $\alpha = 5\%$  (0.05). If the

F probability value is smaller than  $\alpha = 5\%$  (0.05), then the overall independent variables affect the dependent variable and vice versa.

- b. Partial Significance Test: Partial testing is testing one by one the independent variables on the dependent variable, assuming other variables are constant or fixed. To find out whether there is influence or not, a probability comparison of each independent variable is carried out with a value of  $\alpha = 5\%$  (0.05). If the probability value of an independent variable is smaller than  $\alpha = 5\%$  (0.05), then each independent variable has a significant effect on the dependent variable and vice versa.
- c. Determination Coefficient ( $R^2$ ): The coefficient of determination ( $R^2$ ) serves to explain how much the independent variables can define the dependent variable. This value describes how close the regression line we estimate with the actual data.  $R^2$  values from 0 to 1 where the closer to 1 then the better the model (Supranto, 2015).

## Result and Discussion

Based on the availability of data, there are 33 Muslim countries of the OIC members selected in this study whose data are in table 2. Based on the level of the human development index, it is arranged into three groups, low HDI (L), medium HDI (M), and high HDI (H).

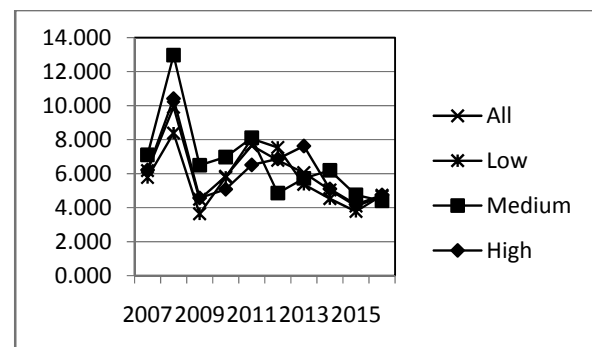
Table 2. List of 33 OIC Countries based on the 2016 Human Development Index Level

No	Country	HDI score	Ranking	No	Country	HDI score	Ranking
1	Niger	0.351	Low	18	Pakistan	0.56	Medium

2	Sierra Leone	0.413	Low	19	Bangladesh	0.597	Medium
3	Burkina Faso	0.42	Low	20	Morocco	0.662	Medium
4	Mali	0.421	Low	21	Kyrgyz Republic	0.669	Medium
5	Mozambique	0.435	Low	22	Indonesia	0.691	Medium
6	Guinea	0.449	Low	23	Egypt, Arab Rep.	0.694	Medium
7	Guinea-Bissau	0.453	Low	24	Gabon	0.698	Medium
8	Gambia, The	0.457	Low	25	Jordan	0.735	High
9	Afghanistan	0.494	Low	26	Algeria	0.753	High
10	Senegal	0.499	Low	27	Albania	0.782	High
11	Sudan	0.499	Low	28	Turkey	0.787	High
12	Togo	0.5	Low	29	Iran, Islamic Rep.	0.796	High
13	Uganda	0.508	Low	30	Kazakhstan	0.797	High
14	Benin	0.512	Low	31	Malaysia	0.799	High
15	Mauritania	0.516	Low	32	Brunei Darussalam	0.852	High
16	Nigeria	0.53	Low	33	Saudi Arabia	0.854	High
17	Cameroon	0.553	Low				

## Inflation Rate in the OIC Member Countries

Inflation is an indicator that measures the level of relative price increases. High inflation is an indication of a relatively rapid economic acceleration, but high inflation will ultimately reduce the purchasing power of the people so that people's income will decrease. Graph 2 illustrates the movement of inflation from year to year based on the classification of HDI levels in OIC member countries.



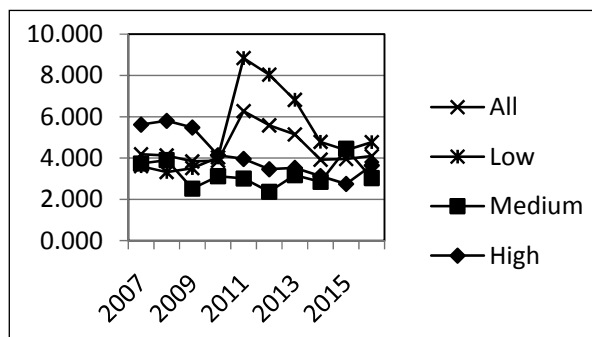
Graph 2. Inflation in OIC Countries Based on HDI Levels (%)

Source: World Bank Publications, 2018

The graph above shows that all countries with different levels of HDI have high inflation rate in 2008. It is due to the presence of the subprime mortgage crisis in the U.S., which spread to other countries. While in 2014-2015, the rate of inflation across the country are experiencing a trend of decline. In the year 2016, average inflation in the entire region of OIC is 4.656%. Also, the states of Sierra Leone, Egypt, Kazakhstan, Nigeria, and already have inflation above 10%, even inflation in Sudan has reached 17%.

### Foreign Direct Investment (FDI) in the OIC Member Countries

FDI is the flow of incoming money (capital inflow/investment) in a country. The high level of FDI means that the flow of incoming money for investment from overseas investors is getting higher. Usually, FDI is used as a source of capital for countries that lack capital, the introduction of new technologies, and broader employment opportunities. Following are FDI movements from year to year:



Graph 3. FDI in OIC Countries Based on HDI Level (Million USD)

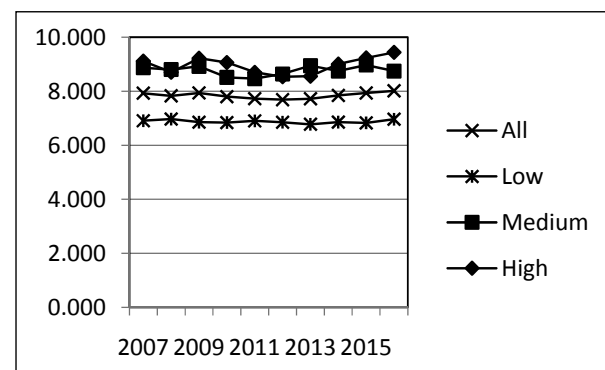
Source: World Bank Publications, 2018

Based on chart 3, known that in the movement of FDI is very volatile. In 2008-2010 decline of

FDI happen in countries with high HDI and medium. While FDI in countries with a low HDI is increasing. Its peak in 2011 a big surge of FDI going to reach 8.839% from previously only 4.025%. Even so, the percentage of FDI in countries with an HDI of the low, medium, high and the year 2016 are in the range of 3-4%.

### Unemployment in the OIC Member Countries

Unemployment is a measurement to see the percentage of people who do not work in working age compared to the amount of labor offered. A high unemployment rate indicates that many people whose income is unable to meet their needs. Income shortages will cause the rising of poverty so that the quality of people's lives will decline. Here is a picture of the percentage of unemployment in the last ten years in the OIC countries member:



Graph 4. The rate of Unemployment in OIC Countries Based on HDI Level (%)

Source: World Bank, 2018

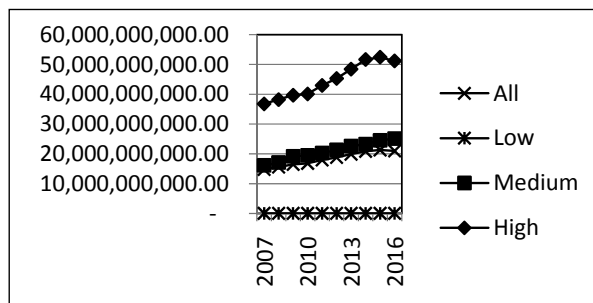
Based on the graph above, note that fluctuations in the number of unemployment each year has not changed much. However, if seen based on HDI, the percentage of unemployment is in most countries with high HDI. Whereas the countries with medium and low HDI, a portion of an unemployment rate



below it. This shows that the higher a country's HDI then the unemployment rate was also higher. In the year 2016, countries with high HDI has the unemployment rate reached 9.434%. They are followed by countries with low and medium HDI respectively of 8.746% and 6.963%. This fact is an oddity because high unemployment is usually followed by low income and welfare so that the HDI is also low. However, in some rich Muslim countries, the State guarantees and fulfilling almost all the needs of its citizens. Therefore, although many residents are unemployed, they continue to receive income from the government.

### Government Expenditure in OIC Member Countries

Government expenditure is a fiscal policy instrument used by the government to stimulate the economy. In this case, the government can use its budget to subsidize, for example in education and health. Targeted government spending is expected to increase income, and eventually, HDI will also increase. The following graph is a description of the amount of government expenditure in the last ten years:



Graph 5. Government Expenditures in OIC Countries Based on HDI Levels (USD)

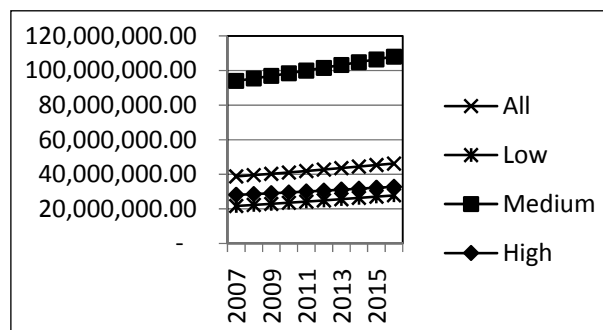
Source: World Bank, 2018

Based on the graph above, note that

government spending increases every year. Also, government spending of each country for the different group have a high distinction. In 2016, countries with high HDI spent USD51.19 billion of government expenditure. While countries with a medium HDI has half of the government spending, amounting to USD25.11 billion. For countries with a low HDI only amounted to USD3.34 billion. The magnitude of government spending in line with the HDI is nothing in their respective countries.

### Population in OIC Member Countries

The population is the number of people or residents in a particular location. When the population increases, a high population will cause the human development index to decline so that eventually HDI will decline too (Arisman, 2008). The following graph is a description of the average population for each HDI level category:



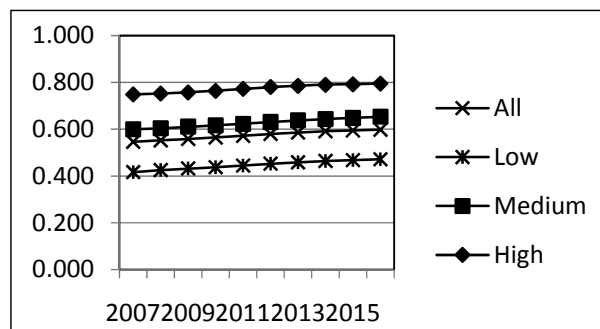
Graph 6. The Population in the Countries of the OIC Based on HDI (Average)

Based on the exposure to the above, note that the highest population exists in countries with a medium HDI score. Where in the year 2016 the population reached 83,428,884 people. It happens is because the three

countries with the largest population are in the range of medium HDI, namely Indonesia (261 million), Pakistan (193 million) and Bangladesh (162 million). While countries with a population of over 100 million more just being in low HDI range, namely Nigeria with 185 million inhabitants. Whereas in the field of high HDI, population only amounted to 85 million are in Iran.

### Human Development Index (HDI) in OIC Member Countries

The HDI or Human Development Index is a measure that explains how people can access development results in obtaining income, health, and education. HDI is used to measure the success of efforts to build the quality of human life. HDI is formed from 3 basic dimensions namely longevity and healthy life, knowledge, and the decent standard of living. Here is the development of HDI in OIC member countries in the last ten years.



**Graph 7. HDI in OIC Member Countries Based on HDI Ranking**

Source: World Bank, 2018

Based on the result above, the HDI values always increase every year. The average amount of HDI for all countries of the OIC member in 2016 is 0.598. When compared with the year

2007 with an HDI of 0.546, it is not so much change within the last ten years (up 0.052). Despite this, all countries for each HDI range always increase every year.

### Data Panel Regression Analysis

Considering the number of panel data regression equations arranged (4 equations), the model testing stages with the Chow Test and Hausman Test as in the last three rows of table 3. Based on the results, it can be concluded that the panel data regression model used is the Fixed Effect. This is because of all probability values in the Chow test <0.05 with a value of 0.00. Therefore, the selected model is the Fixed Effect compared to Common Effect (Partial Least Square). Whereas based on Hausman test results the probability value is <0.05 so the selected model is the Fixed Effect model as the best model used in this study compared to the Random Effect model.

**Table 3. Result Summary of 4 Fixed Effect Data Panel Regression Models**

	All countries	Low HDI countries	Medium HDI countries	High HDI countries
Const.	-2,630188*** (19,33)	-3,026315*** (-30,61)	-3,687928*** (-7,94)	-0,936619 (-1,88)
Population (average)	0,191077*** (23,32)	0,21123*** (34,98)	0,2454129*** (9,15)	0,0999237** (3,30)
Government Expenditure (%GDP)	7,88e-13*** (7,66)	3,14e-13 (0,71)	8,53e-13* (2,59)	1,08e-12*** (6,62)
FDI (%GDP)	0,0004161** (2,78)	0,0001578 (1,57)	0,0003766 (0,59)	0,0010294 (1,20)
Unemployment (%Labor Force)	0,0007098 (1,22)	0,0013321* (2,51)	-0,0004318 (-0,38)	0,0010424 (0,65)
Inflation (% annual)	-0,0000234 (0,19)	-0,0000582 (-0,67)	-0,0001841 (-0,51)	0,0002841 (0,67)
R2	0,7370	0,9019	0,7824	0,5646
Prob. F	0,0000	0	0,0000	0,0000
Observation	330	170	70	90
Year	2007-2016	2007-2016	2007-2016	2007-2016
Chow test	0,0000	0,0000	0,0000	0,0000
Hausman test	0,0000	0,0000	0,0000	0,0005
Model	Fixed Effect	Fixed Effect	Fixed Effect	Fixed Effect

Based on the table above, note that overall, changing in the HDI is affected by unemployment, inflation, population, government spending, and FDI. In countries with a low HDI, unemployment, inflation, population, government spending, and FDI affect the HDI of 90.19%. Whereas, in countries with a medium HDI of 78.24% and countries with high HDI of 56.46%. Then for the whole countries of the OIC member, the influence of 73.70% ( $R^2$ value).

In all countries of OIC member, only populations, government spending, and the FDI affect the HDI partially. The number of observations used is 330 observation consisting of 33 countries of the OIC. On the OIC countries member with low HDI, only population and unemployment that influence to the HDI individually. The number of observations used is 170 observation that consists of 17 countries of the OIC. On OIC member countries with medium and high HDI level, only population and Government spending that influence the HDI individually.

An increasing number of the population in Muslim countries also followed by an increase in the HDI, this happens because the number of population is a factor of production for the economic development of a country if appropriately managed. However, until a certain point, the number of inhabitants would be a burden for the economy if they are not productive. This fact shows that the population in Muslim countries are in the productive age. This is an excellent development potential for the country.

Government spending also holds a significant role in boosting the HDI in Muslim countries, except in countries with a low HDI level,

such as Nigeria, Mali, Afghanistan, etc. These countries did indeed include poor countries still experiencing social, political instability and security. Their Government isn't able to fund development projects for the improvement of the well-being of its people. These findings support the results of research conducted by Razmi (2012) and also Arisman (2018).

The foreign direct investment (FDI) variable also could not afford to raise the HDI for each group of countries, but the overall HDI was able to increase, though with a relatively small value. This is contrary to the findings of Baghirzade (2012), allegedly because of the low level of foreign direct investment to the Muslim majority countries less conducive to foreign investors. This is one of the severe problems faced by many Muslim countries.

Unemployment also shows the insignificant effect on the level of HDI in various Muslim countries, except for a group of countries with a low HDI. The findings are considered quite strange that a positive effect against unemployment levels of HDI in certain countries (low HDI). Of course, this is at odds with the theory and a variety of existing research. These findings still need further study in depth to reveal the real facts behind these findings.

Inflation does not affect the HDI because the inflation rate in the last ten years shows the fluctuation conditions, affected by the global economy. These findings do not support the research conducted by Smith & Shah (2016). Although in the last few years inflation tends to decline in various Muslim countries, its effects

on the HDI are not significant. This indicates that the economy in different Muslim countries shows a stable condition and is likely to improve.

## CONCLUSION

The entire model compiled show a significant effect of the overall some variables on the level of HDI in the Muslim countries. However, the number of the population contributes positively to HDI in all models compiled. Unfortunately, the variable of foreign direct investment (FDI) has no significant contribution to the increasing of HDI; this is the biggest challenge faced by governments in various Muslim countries. Government fiscal policy reflected in government spending (G) contributes positively to HDI in medium and high HDI countries. It is mean that the government has a crucial role in increasing the HDI in OIC member countries. Unemployment and inflation do not have a significant effect on the increasing of HDI in Muslim countries.

## REFERENCES

- Arisman. (2018). Determinant of Human Development Index in ASEAN Countries, *Jurnal Ilmu Ekonomi*, 7(1): 113-122.
- Askari, H., & Rehman, S. (2013). A Survey of the Economic Development of OIC Countries. *Economic Development and Islamic Finance*, The World Bank, Washington.
- Baghirzade, N. (2012). *The Impact of Foreign Direct Investment on Human Development Index in Commonwealth of Independent States*. Thesis in Eastern Mediterranean University 2012.
- Budiono. (2015). *Introduction to Macroeconomics*. Yogyakarta: BPFE.
- Hashi, A. A. & Bashiir, A. (2009). Human Capital Development from Islamic Perspective. *Conference Paper: International Conference on Human Capital Development*, by UMP, Kuantan Pahang, Malaysia. May 25-27, 2009.
- Hasyim, A. I. (2016). *Ekonomi Makro*. Jakarta: Kencana.
- Huda, N. (2008). *Islamic Macroeconomics: Theoretical Approach*. Jakarta: Kencana Prenada Media Group.
- Katalog BPS. (2008). Human Development Index 2006-2007. Jakarta.
- Kuncoro, M. (2001). *Quantitative Method: Theory and Practice for Business and Economics*. Yogyakarta: UPP-AMP YKPN.
- Kuncoro, M. (2009). *Indonesian Economy*. Yogyakarta: UPP STIM YKPN
- Mangkoesoebroto, G. (2002). *Public Economics*. Yogyakarta: BPFE.
- Mankiw, N. G, et., al. (2014). *Introduction to Macroeconomics*. Jakarta: Salemba Empat.
- Razmi, M. J. (2012). Investigating the Effect of Government Health Expenditure on HDI in Iran. *Journal of Knowledge Management, Economics, and Information Technology*, 2012(5).
- Sinulingga, S. (2014). *Research Method*. Medan: USU Press.

- Smith & Shah. (2016). Determinants of Human Development Index: A Cross Country Empirical Analysis. *Munich Personal RePEc Archive* (MPRA) Paper No. 73759.
- Sukirno, S. (2002). *Macroeconomics*. Jakarta: Raja Grafindo Persada.
- Sukirno, S. (2010). *Development Economics: Process, Problem, and Policy*. Jakarta: Kencana Prenada Media Grup.
- Supranto.(2015). *Econometrics*. Bogor: Ghalia Indonesia.
- Suryawati. (2004). *Macroeconomics Theory*. Yogyakarta. UPP YKPN.
- Thaib, L. (2013). Human Capital Development from Islamic Perspective: Malaysia's Experience, *European Journal of Management Sciences and Economics*, 1(1).
- Todaro, M. P. & Stephen C. S. (2015). *Economic Development*. New York: New York University.
- UNDP. (2018). Human Development Indices and Indicators: 2018 Statistical Update. United Nations Development Programme, New York.